

Description

Apparatus To Hold And Stabilize Fast Food Containers In A Cylindrical Automobile Cup Holder

BACKGROUND OF INVENTION

[0001] Cup holders in automobiles have existed for many years. Drivers and passengers have the need to place drinks in a receptacle while the car is in motion or when they need their hands free to perform other tasks. Initially, plastic cup holders were made to fit onto a car window. Although these portable holders performed their function well enough, the window location proved inconvenient. Eventually, most automobile manufacturers sold cars with built-in cup holders. These cup holders would also be used to hold other items such as eye glasses, loose change, etc. Placing a drink inside a cup holder keeps it in a fixed position while the car is in motion, thereby preventing the liquid from spilling out of the cup. An occupant of a vehicle can conveniently place a cup in the cup

holder, remove the cup to drink some of its contents, and then replace the cup in the holder.

[0002] However, even though automobiles now have built-in cup holders, drivers are not as fortunate with preventing spillage of other types of fast foods. For example, French fried potatoes are most often sold in containers that are not cylindrical. These containers have openings larger than standard drinking cups so as to enable people to easily insert their fingers. They often have a larger volume than standard drinking cups so as to accommodate a standard number of fries. They are designed to lie flat on restaurant trays so that diners may conveniently remove a small number of fries until the entire portion is consumed. These larger sized containers are more suited to holding this type of food than standard sized cylindrical drinking cups. Unfortunately, when these containers are placed on the passenger seat so that a driver may eat while driving, the potatoes often spill out of them onto the seats or even onto the floor. Therefore, it would be useful to have an adapter that would permit these larger sized or differently shaped fast food containers to fit in a standard automobile cup holder and maintain them in an upright position to prevent spilling of their contents. This is the objective

of the present invention.

SUMMARY OF INVENTION

[0003] The present invention is an adapter that accomplishes the above mentioned objective. It comprises a lower rigid cylindrical member and two flexible upper members that are mechanically biased to return to their original position when they are not deformed therefrom. The cylindrical member fits into the automobile cup holder, and the flexible members hold a larger sized container temporarily in a fixed position. It permits the larger sized container to be conveniently inserted and removed. It is preferably manufactured as a single unit either from plastic, paper, or metal.

BRIEF DESCRIPTION OF DRAWINGS

[0004] FIG. 1 shows the two-dimensional projection views for the present invention.

[0005] FIG. 1(a) represents a top plan view thereof. This view is identical to the bottom plan view thereof.

[0006] FIG. 1(b) represents a left-side elevational view thereof. This view is identical to the right-side elevational view thereof.

[0007] FIG. 1(c) represents a front elevational view thereof. This

view is identical to the rear elevational view thereof.

[0008] FIG. 2 shows an isometric view of the present invention as seen from the front.

[0009] FIG. 3 shows a magnification of FIG. 1(e) representing a bottom plan view.

[0010] FIG. 4 shows a magnification of either FIG. 1(b) or FIG. 1(d) representing a side elevational view.

[0011] FIG. 5 shows an isometric view of the present invention as seen from either side with a fries container inserted therein and being held in place.

DETAILED DESCRIPTION

[0012] The present invention can best be understood by referring to FIG. 2. FIG. 2 is an isometric view of the preferred embodiment of the apparatus represented by the various views in FIG. 1 as viewed from the front. In the preferred embodiment, the apparatus 1 comprises a lower rigid cylindrical member 2 and two flexible upper members 5. It may comprise more than two flexible upper members if desired. The diameter of the cylindrical lower member is chosen so that it may fit conveniently into a standard automobile cup holder. Cylindrical member 2 is preferably hollow, but it may be solid. If hollow, member 2 is a shell encompassing cylindrical volume 3. In other embodi-

ments, the lower member may be a conical section having a varying diameter so that the apparatus can fit into cylindrical cup holders of different sizes.

[0013] In the preferred embodiment, the flexible upper members are sections of a cylindrical shell having the same diameter as the lower member. In order to provide flexibility, portions of the cylindrical surfaces of these upper members are cut away to provide the shape shown in the figures. In other embodiments, the section diameter of the upper members may be either smaller or larger than that of the lower members. In fact, they need not be cylindrical sections at all.

[0014] If the entire apparatus 1 were to be fabricated as a cylindrical shell and then shaped as in FIG. 2, then lower member 2 might be expected to be as flexible as upper members 5. In order to maintain stability in the automobile cup holder so that the apparatus does not move about when placed therein, a plurality of protruding strips 4 is placed on the outer surface of the lower member 2. These protruding strips also contribute to the rigidity of the lower member.

[0015] FIG. 3 shows a magnification of the top plan view of FIG. 1(a). In FIG. 3, six protruding strips 4 are shown on the

outer surface of lower member 2. FIG. 4 shows a magnification of either side view shown in FIG. 1(b). In FIG. 4, it can be seen that the protruding strips 4 are positioned only on the surface of lower member 2 and not on the surfaces of upper members 5. Also, the protruding strips are shown in the figure as being tapered (i.e., having less material at the top of member 2 than at the bottom). Tapering of the protruding strips is present in the preferred embodiment, but it is not necessary.

[0016] Finally, FIG. 5 shows an isometric view of the present invention as seen from either side with a fries container 6 inserted therein and being held in place by flexible upper members 5.